

BIOGRAPHICAL SKETCH

NAME	POSITION TITLE		
Robert T. Zahradnik	Vice-President, Product Development		
eRA COMMONS USER NAME			
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Pennsylvania State University	B.S.	1966	Chemistry
Boston University	Ph.D.	1971	Physical Chemistry

A. Positions and Honors.

Positions and Employment

1970-79	Forsyth Institute, Research Chemist Diagnosis & Treatment Oral Diseases, Boston, MA
1978-80	Giner Research Laboratories, Chief Chemist, Waltham, MA
1980-83	Johnson & Johnson Co. Manager & formulator oral pharmaceuticals, Princeton, NJ
1983-86	Cambridge Research Labs (Johnson & Johnson), Head of Discovery Research and Development Dental Products, Cambridge MA
1986-02	Advanced Clinical Technologies, President/CEO, Norwood MA
1993-05	Professional Dental Technologies Therapeutics, Inc., General Manager, Batesville AR
1999-05	ProHealth Manufacturing, General Manager, Batesville AR
2005-08	Oragenics, Inc. President/CEO, Alachua FL
2008-Present	Oragenics, Inc. Vice-President Business and Product Development

B. Selected peer-reviewed publications (in chronological order).

(Publications selected from 24 peer-reviewed publications)

1. A. Prock and RT Zahradnik: Photoconductivity of pyranthrene in benzene. J Chem Phys 49:3204-3210, 1968.
2. A. Prock and RT Zahradnik: Flash photoconductivity of rebrene in benzene solution. J Chem Phys 53: 4093-4095, 1970.
3. A. Prock, RT Zahradnik and S Grassino: Ion-image state as an intermediate in the surface generation of photocurrent in solution. J Am Chem Soc 95:726-731, 1973.
4. EC Moreno and RT Zahradnik: Calculation of liquid junction potentials. J. Electrochem. Soc. 120: 641-643, 1973.
5. EC Moreno and RT Zahradnik: The pore structure of human dental enamel. Archs Oral Biol. 18: 1063-1068, 1973.
6. EC Moreno, M. Kresak and RT Zahradnik: Fluorided hydroxyapatite solubility and caries formation. Nature 247:64-65, 1974.
7. EC Moreno and RT Zahradnik: Chemistry of enamel subsurface demineralization *in vitro*. J Dent Res 53:226-235, 1974.
8. RT Zahradnik and EC Moreno: Structural features of human enamel as revealed by isothermal water vapor. Archs Oral Biol 20:317-325, 1975.
9. RT Zahradnik, EC Moreno and EJ Burke: Effect of salivary pellicles on enamel subsurface demineralization *in vitro*. J. Dent Res 55:664-670, 1976.
10. EC Moreno, M. Kresak and RT Zahradnik: Physicochemical aspects of fluoride-apatite systems relevant to the study of dental caries. Caries Res 11:142-171, 1977.
11. RT Zahradnik, D. Propas and EC Moreno: *In vitro* enamel demineralization by *Streptococcus mutans* in the presence of salivary pellicles. J Dent Rest 56:1107-1110, 1977.

12. RT Zahradnik and EC Moreno: Progressive stages of enamel subsurface demineralization. Arch Oral Biol 22:585-591, 1977.
13. RT Zahradnik, D. Propas and EC Moreno: Effect of fluoride topical solutions on enamel demineralization by lactate buffers and *Streptococcus mutans in vitro*. J Dent Res 57:940-946, 1978.
14. RT Zahradnik, D. Propas and EC Moreno: Effect of Salivary pellicle formation time on *in vitro* attachment and demineralization by *Streptococcus mutans*. J Dent Res 57:1036-1042, 1978.
15. EC Moreno and RT Zahradnik: Demineralization and remineralization of dental enamel; in Tooth Enamel III (eds JD Termine and MU Nylen). 58: Special Issue B, 896-902, J. Dent. Res. 1979.
16. RT Zahradnik: Effect of fluoride rinses upon *in vitro* enamel remineralization. J dent Res 59:1065-1066, 1980.
17. H. Lerner, RT Zahradnik and M. Buchbinder: Miniature implantable tantalum/tantalum oxide stimulating electrodes. IEEE Transactions on Biomed Eng, BME-29, 290-292, 1982.
18. JE Bowers and RT Zahradnik: Evaluation of a chairside gingival protease test for use in periodontal diagnosis. J Clinical Dent 1:106-109, 1989.
19. RT Zahradnik: Enzyme test monitors periodontal disease status. Implant Soc. 2(1):10, 16(1991).
20. RL Boyd, L. McLey and RT Zahradnik: Clinical and laboratory evaluation of powered electric toothbrushes: *in vitro* determination of average force for use of manual and powered toothbrushes. J Clinical Dent 8:72-75, 1997.
21. RT Zahradnik: Measurement of proteinase activity in gingival crevicular fluid following periodontal therapy. Adv Dent Res. 12(2):40-2, 1998.
22. RT Zahradnik, I. Magnusson, C. Walker, E. McDonell, CH Hillman and JD Hillman: Preliminary assessment of safety and effectiveness in humans of ProBiora³TM, a probiotic mouthwash. J Applied Micro. 107: 682-690, 2009.
23. JD Hillman, E. McDonell, T. Cramm, CH Hillman and RT Zahradnik: A spontaneous lactate dehydrogenase deficient mutant of *Streptococcus rattus* for use as a probiotic in the prevention of dental caries. J Applied Micro. 107: 1551-1558, 2009.
24. JD Hillman, E. McDonell, CH Hillman and RT Zahradnik: Safety assessment of ProBiora³TM, a probiotics mouthwash: subchronic toxicity study in rats. Internat J Toxicity. 28: 357-367, 2009.

PATENTS: None

D. Research Support **Ongoing Research Support**

0610669 Hillman (PI) 02/15/2008 to 01/31/2010
Lantibiotic Synthesis Using Differentially Protected Orthogonal Lanthionines
NSF SBIR Phase 2
The major goal of this project is to synthesize and test the novel antibiotic, MU1140.
Role: Principal Investigator

Completed Research Support

1R43CA124006 Hillman (PI) 05/01/07-10/31/07
NIH/NCI

CMAT Analysis of Colorectal Bowel Cancer

The major goals of this project are to adapt Proteomics-based Change Mediated Antigen Technology to analyze colorectal bowel tumors for novel genes and their gene products that can serve as targets for diagnostic and therapeutic strategies.